STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 6839

Joint Petition of Vermont Electric Power Company, Inc., Green Mountain Power Corporation and Vermont Electric Cooperative, Inc., for a Certificate of Public Good authorizing the construction of a substation at Tafts Corners and the construction of a switching station on Hinesburg Road in Williston, Vermont, and the associated construction and improvement of transmission lines from Tafts Corner to the switching station to the existing Digital substation to Dorset Street in South Burlington, Vermont --	Hearings at Montpelier, Vermont July 2, 2003 September 9, 2003

Order entered: 10/22/2003

PRESENT: Wayne L. Foster, Hearing Officer

APPEARANCES: William B. Piper, Esq.
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for Vermont Department of Public Service

1. Did not attend September 9, 2003, continued technical hearing.
2. Did not attend September 9, 2003, continued technical hearing.
3. Did not attend September 9, 2003, continued technical hearing.
4. Filed Notice of Appearance. Did not attend July 2, 2003, technical hearing.

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for Town of Williston

I. INTRODUCTION

This case concerns a joint petition filed by Vermont Electric Power Company, Inc. ("VELCO"), Green Mountain Power Corporation ("GMP"), and Vermont Electric Cooperative, Inc. ("VEC") on April 1, 2003, and a supplemental filing of additional material on June 6, 2003, requesting a certificate of public good ("CPG") authorizing the construction of a 115 kV/34.5 kV substation at Tafts Corners and a 34.5 kV switching station off St. George Road, both in the Town of Williston, Vermont, and the associated construction and improvement of 34.5 kV transmission lines from Tafts Corners to the switching station (including a 34.5 kV transmission connection from the switching station to the existing VEC Williston Substation), from the switching station to the existing GMP Digital Substation, and on to the existing GMP Dorset Street Substation, all located in the Town of Williston, Vermont, and the City of South Burlington, Vermont.

On June 19, 2003, a public hearing was held in Williston, Vermont. Notice of the public hearing was published in "The Burlington Free Press" on May 29 and June 5, 2003. The public hearing was held as scheduled in the Cafeteria of the Williston Central School, located at 195 Central School Drive, Williston, Vermont. No member of the general public was present at the public hearing. Also, on June 19, 2003, a site visit was held at 4:00 p.m.

On June 25, 2003, VELCO, GMP, VEC, the Department of Public Service ("DPS"), the Agency of Natural Resources ("ANR"), and the Town of Williston ("Williston") filed a Stipulation in which the parties settled all outstanding issues in this docket and agreed that the

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5. Did not attend September 9, 2003, continued technical hearing.

6. Filed Notice of Appearance. Did not attend July 2, 2003, technical hearing or September 9, 2003, continued technical hearing.

Board should issue a CPG, subject to the conditions set forth in the Stipulation (see exh. Joint-1). The Stipulation is conditioned upon Board approval.

Notice of the July 2, 2003, technical hearing was sent on June 17, 2003, to all parties specified in 30 V.S.A. § 248 and all other interested parties. A technical hearing was held as scheduled on July 2, 2003, at 9:30 a.m., at the Public Service Board Hearing Room, Third Floor, Chittenden Bank Building, 112 State Street, Montpelier, Vermont. No one appeared in opposition to the petition and substantial evidence was presented in support of the petition.

The DPS filed a Determination under 30 V.S.A. § 202(f) on July 3, 2003 (exh. VELCO-2). Additional evidentiary filings were made by the petitioners on July 9, 11, 16, and 23, August 18 and 29, and September 9, 15 and 18, 2003.

At the request of the hearing officer, an additional site visit to the proposed Tafts Corners Substation site was held at 1:30 p.m. on Tuesday, September 9, 2003. A continued technical hearing was held at 3:00 p.m., following the site visit. Notice of the continued technical hearing was sent on September 5, 2003, to all parties, statutory interested persons and all other interested persons. The continued technical hearing was held as scheduled on September 9, 2003, at 3:00 p.m., at the Public Service Board Hearing Room, Third Floor, Chittenden Bank Building, 112 State Street, Montpelier Vermont.

II. FINDINGS

Introduction

Based upon the substantial evidence of record and the testimony presented at the hearing, I hereby report the following findings to the Board in accordance with 30 V.S.A. § 8.

1. VELCO, GMP and VEC are each a company as defined by Section 201 of Title 30, Vermont Statutes Annotated, and as such each is subject to the Vermont Public Service Board's ("Board") jurisdiction pursuant to Section 203 of Title 30. Pet. at 1.

2. VELCO's offices are located at 366 Pinnacle Ridge Road, Rutland, Vermont 05701. Pet. at 1.

3. GMP's offices are located at 163 Acorn Lane, Colchester, Vermont 05446. Pet. at 1.

4. VEC's offices are located at 182 School Street, Johnson, Vermont 05656. Pet. at 1.

5. VELCO owns, operates and plans for the maintenance, upgrade and expansion of Vermont's bulk electric transmission system network (115 kV and above). Pet. at 2.

6. GMP and VEC own subtransmission and distribution facilities in Chittenden County. Pet. at 2.

7. VELCO's 115 kV transmission system supplies power to the Chittenden County area from transmission sources located in Plattsburgh, New York, and in Highgate, Williamstown and West Rutland, Vermont. Belval pf. at 2.

8. VELCO delivery points in Chittenden County are at the Essex, East Avenue and Queen City VELCO Substations. Belval pf. at 2.

9. VELCO delivers power to GMP's 34.5 kV subtransmission system at the Queen City Substation and at the Essex Substation. Belval pf. at 2.

10. GMP delivers power to the City of Burlington Electric Department ("BED") through a 34.5/ 13.8 kV transformer in BED's Lake Street Substation. Belval pf. at 2; exh. VELCO RB-2 and RB-3.

11. As a result of significant growth in electrical demand in the Chittenden County region and the expected continuation of that growth, improvements in the existing electrical facilities are required to allow GMP and VEC to provide safe, reliable and economic power to the region. Belval pf. at 3; Cecchini pf. at 5-6; Abendroth pf. at 2-3.

12. To address these needs, VELCO, GMP and VEC are proposing to construct the "Tafts Corners Project,", also referred to as the "Digital Injection Project," which is associated with the Digital Injection Area Specific Collaborative in PSB Docket No. 6797. Belval pf. at 3; Cecchini pf. at 6; Abendroth pf. at 2-3.

13. The proposed Tafts Corners Project has six major components, as follows:

Component 1: Tafts Corners Substation. Construction of a new VELCO 115 kV/ 34.5 kV substation adjacent to Interstate 89 ("I-89") at Exit 12 near Tafts Corners in Williston, Vermont. Belval pf. at 3-4; exhs. VELCO RB-5, -6, -7 and RB-8.

Component 2: I-89 Crossing. A new 34.5 kV transmission line to be jointly owned by GMP and VEC which will be constructed across Interstate 89 in the existing VELCO 115 kV transmission line corridor. Belval pf. at 4.

Component 3: 34.5 kV reconstruction from the I-89 crossing to a new switching structure. This new 34.5 kV transmission line, to be jointly owned by GMP and VEC, will be overbuilt on a rebuilt existing 12.47 kV distribution line and will be approximately one mile long. Belval pf. at 4.

Component 4: Switching Structure. A switching structure will be constructed in Williston (at the end of the above one mile long 34.5 kV transmission line) to interconnect that line and other 34.5 kV rebuilt lines, including a 34.5 kV transmission line connecting to the existing VEC Williston Substation and the rebuilt 3330 transmission line described below. The switching structure also allows portions of the electrical facilities to be switched out of service for maintenance or emergency repairs. The switching structure will be constructed where the existing VEC 12.47 kV distribution line intersects the existing VEC 34.5 kV 3330 line just north of VEC's existing Williston Substation and will also be jointly owned by GMP and VEC. As noted above, the switching station construction will also require VEC to rebuild a short section of its 34.5 kV line from the proposed switching station to the existing VEC Williston Substation. Belval pf. at 4.

Component 5: Rebuild existing 3330 transmission line. The fifth component of the proposed project will be the rebuild of the existing VEC 34.5 kV line ("3330 line") from the switching station to the Digital Substation. The rebuild is required to accommodate the larger conductor required for this transmission line by GMP. The new rebuilt line will be wholly-owned by GMP. Belval pf. at 5.

Component 6: Rebuild of the existing 3332 transmission line. GMP will rebuild its existing 3332 line, which is a 34.5 kV transmission line, from its existing Digital Substation to its existing Dorset Street Substation. Belval pf. at 5.

14. VELCO designs its transmission system to survive a single contingency event without loss of supply to the interconnected subtransmission and distribution systems. Load growth in the Chittenden County area has strained the subtransmission facilities of GMP and VEC in the area to the extent that certain contingencies could violate this criterion. Belval pf. at 5.

15. This proposed project is necessary to limit the risk exposure of loss of load for a fault on VELCO's 115 kV transmission line ("K-33") that connects VELCO's Williston and Queen City

substations. During peak summer load periods, such a fault would interrupt service to the GMP 34.5 kV subtransmission system served out of the VELCO Queen City Substation and thus, to BED's distribution system served by GMP from BED's Lake Street Substation, resulting in a loss of electric service to thousands of customers in the area, including downtown Burlington. Belval pf. at 5.

16. Accepted planning standards require electric utilities to plan their transmission systems to withstand a single contingency without the loss of load. The proposed Tafts Corners Substation and associated subtransmission upgrade project allows VELCO and GMP to meet this criterion for the Chittenden County load. Cecchini pf. at 7.

17. VELCO's operating procedures incorporate plans for load shedding to prevent damage to VELCO's transformers and other equipment, while confining outages to the minimum geographic area. The proposed project helps to remove exposure to overload on the Essex and Queen City transformers, thereby minimizing the possibility of widespread outages. Belval pf. at 5.

18. The proposed project, by providing a new VELCO source into GMP's and VEC's 34.5 kV subtransmission networks, will improve area reliability, reduce losses and minimize the risk of loss of load. Belval pf. at 6.

19. VELCO is seeking a CPG to construct the proposed 115 kV/ 34.5 kV Tafts Corners Substation. GMP and VEC are seeking a joint CPG to construct the proposed 34.5 kV line across I-89, then one mile of 34.5 kV line to the proposed switching station, and the proposed switching station itself. GMP is seeking a CPG to rebuild the existing 3330 transmission line that runs from the proposed switching station to the existing GMP Digital Substation and a CPG to rebuild its 3332 34.5 kV transmission line from the existing Digital Substation to its existing Dorset Street Substation. VEC seeks a CPG for 34.5 kV line reconstruction from the proposed switching station to the existing VEC Williston Substation. Belval pf. at 7.

20. The Petitioners seek to complete the proposed project by the second quarter of 2004. Exposure to critical contingencies has been mitigated to this point in time through a combination of GMP rebuilding its 34.5 kV transmission lines from the VELCO substations located at Essex

and Queen City, operation of the McNeil generating plant, plus the installation of a temporary second transformer at Queen City. Belval pf. at 8.

21. The June 25, 2003, Stipulation by the parties, described in the introduction above, includes the following conditions:

a. The Petitioners will make the following compliance filings, for which Board approval is required prior to commencement of construction:
   i. By August 31, 2003, the site plan, detailed engineering design, vegetative screening plan, soil erosion control (in conformance with paragraph 21.e., below) and access plan for the proposed substation.
   ii. By August 31, 2003, the final proposal for the location of the proposed substation and the justification therefor.
   iii. By August 15, 2003, the detailed engineering designs and site plans for the 3330 line, the I-89 crossing, the switching station, and the 3332 line.

b. The precise location of the substation adjacent to I-89 is not approved. The Petitioners shall explore the possibility of moving the substation further north away from I-89 and closer to Maple Tree Place and shall file their final proposal on the substation's location in accordance with subparagraph (a.), above.

c. The compliance filings discussed in subparagraph (a.), above, at a minimum, shall include all facilities to be constructed, pole locations, and clearing. Such compliance filings shall be in conformance with the Petitioners' prefiled testimony in this docket and the substantive criteria set forth in 30 V.S.A. § 248.

d. The Petitioners shall construct the A-frame structures at the proposed substation to the minimum feasible height.

e. VELCO shall prepare an Erosion Prevention and Sediment Control Plan ("EPSCP") for the Tafts Corner Substation and the upgrade of the 34.5 kV line where it spans Muddy Brook in conformance with ANR's "Erosion and Sediment Control Plan Checklist" and submit such EPSCP to ANR for approval. VELCO shall not commence construction of the Proposed Project prior to obtaining such approval

from the Water Quality Division of ANR's Department of Environmental Conservation.

f. Prior to the commencement of construction, VELCO shall apply for and obtain a water supply/wastewater disposal permit from ANR's Department of Environmental Conservation for the Tafts Corner substation.

g. VELCO shall comply with the stipulations of the Division of Historic Preservation contained in a letter dated June 4, 2003, from Emily Wadhams of the Division, except that all references in the letter to the Department shall be deemed references to the Board.

h. Within sixty (60) days of completion of construction, the Petitioners shall submit to the Board, for its approval, proposed plans showing proposed vegetative screening for all portions of the Proposed Project except the proposed substation. Within thirty (30) days of such submission, the Petitioners shall review the Proposed Project with the Board's staff, ANR, Williston and the Department to determine: (i) the plantings and landscaping necessary to minimize the visual impacts of all portions of the project except the proposed substation; and (ii) whether, to minimize the visual impacts of the substation, modifications are necessary to the plantings and screening contained in the vegetative screening plan submitted pursuant to subparagraph a of this paragraph. All plantings and landscaping shall be completed within one (1) year of final Board approval.

Exh. Joint 1.

22. The estimated total cost of the six (6) components of the proposed project is $4,396,000, broken down as follows:

Component 1 (Tafts Corners Substation)	$2,895,000
Component 2 (I-89 Crossing)	77,000
Component 3 (I-89 to 3330 Line)	149,000
Component 4 (Switching Structure)	115,000
Component 5 (3330 Line)	580,000
Component 6 (3332 Line)	580,000

Exh. GMP-TC-14.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

23. The proposed project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality. This finding is supported by findings 24 through 31, below.

24. The Petitioners examined the town plans of Williston and South Burlington and the regional plan of the Chittenden County Regional Planning Commission ("Commission") for current goals, policies and guidance related to construction and improvement of transmission facilities. Boyle pf. at 6.

25. The Williston Town Plan gives recommendations on the placement of distribution lines, but does not have any recommendations for the siting or construction of transmission facilities. Boyle pf. at 7.

26. The Williston Town Plan does include recommendations for visual impact. The site of the proposed substation is located in the type of area described in the plan as one that would meet these recommendations, as it will be partially screened by a hedgerow and will not allow viewers a clear "window into the landscape." Boyle pf. at 7.

27. The Town Plan of South Burlington includes a description of the existing transmission lines and states that future utility lines are encouraged to be underground. Since the proposed project within the City of South Burlington involves the reconductoring of an existing transmission line, undergrounding of these lines is cost-prohibitive. The Plan further states that future transmission lines should be confined to existing corridors, as is being done for virtually all of this proposed project. Boyle pf. at 4, 7.

28. The Chittenden County Regional Plan includes three areas related to development of transmission and energy facilities. Chapter 4, Infrastructure, states a goal that transmission lines should be consolidated or co-located in existing rights-of-way or placed underground wherever economically feasible. Undergrounding is not economically feasible for the proposed

reconductoring project, but the proposed project does locate the proposed transmission lines in existing corridors. Boyle pf. at 8.

29. The Chittenden County Regional Plan also contains a policy to request utility companies to cooperate with the Commission to determine the location of proposed energy generation plants. While the proposed project is not a proposal for a generation plant, the Petitioners are following appropriate protocol and cooperating with the local and regional planning commissions. Boyle pf. at 8.

30. The Chittenden County Regional Plan does support the construction, expansion and efficient utilization of necessary and ancillary infrastructure to accommodate future economic development. The proposed project is designed to incresae the capacity of the existing transmission infrastructure, which is needed in order to accommodate load growth in the area. Boyle pf. at 8.

31. The Town of Williston is a party and a signatory to the Stipulation which requires, *inter alia*, a full screening plan for the proposed substation to be filed on or before August 30, 2003. Joint Exh. 1.

Need For Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

32. The proposed project is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy efficiency and load management measures. This finding is supported by findings 11, 14-18, above and 33 - 43, below.

33. The proposed project cannot be cost-effectively avoided or deferred through DSM or distributed generation ("DG") options and is required to meet a need that is present today. Based upon the existing and forecasted load in the subject area, acceptable load levels cannot be obtained through the load reductions that feasibly might be achieved, in the necessary time frame, through cost-effective energy conservation, efficiency and load management measures. Belval pf. at 13; Exh. GMP-TC-08 at 7.

34. The proposed substation and transmission facilities are required to provide a new 115/34.5 kV source from VELCO to the GMP Digital substation in order to reduce exposure to loss of load from a single contingency event. Belval pf. at 13.

35. The exposure of the GMP customers in the Chittenden County area to that single contingency event is projected to increase annually as the load increases. The existing and projected peak summer demand and hours of exposure are provided below for the years 2002 through 2006:

2002 - peak demand equals 175 megawatts, hours of exposure equal 812 hours;
2003 - peak demand equals 178 megawatts, hours of exposure equal 1,008 hours;
2004 - peak demand equals 184 megawatts, hours of exposure equal 1,204 hours;
2005 - peak demand equals 191 megawatts, hours of exposure equal 1,386 hours;
2006 - peak demand equals 197 megawatts, hours of exposure equal 1,568 hours.

Cecchini pf. at 6.

36. GMP is concerned about a single contingency event that would result in GMP having to interrupt service both to its customers and power wheeled across its system to others, if the event were to occur during summer peak load periods. That contingency event involves a line loss occurring during the peak load period when the McNeil Generating Station is off-line. Specifically, loss of the existing VELCO 115 kV line from Williston to the Queen City Substation during summer peak loads interrupts power flow to the permanent and temporary 115 kV/34.5 kV transformers at VELCO's Queen City Substation. This event would result in placing the entire load burden for the Chittenden County area onto the two transformers at VELCO's Essex Substation. As a result, the two VELCO Essex Substation transformers would be overloaded, thus creating low voltage on the western portion of the electrical facilities in the region. Load would then need to be shed automatically using under-voltage relays to avoid damaging the remaining transformers at the VELCO Essex Substation. The loads that would need to be shed would be GMP's Queen City Substation load (2,000 of GMP's customers in South Burlington, west of Spear Street) and BED's load served from GMP's 34.5 kV subtransmission at Lake Street (one-third of Burlington that includes the downtown area). Cecchini pf. at 7.

37. The above-described interruption of load would occur when the Chittenden County area was experiencing high temperatures (greater than 80 degrees F). Load restoration from such an interruption could take up to 48 hours, creating an emergency condition for the customers in the area impacted with load shedding. Cecchini pf. at 7.

38. VEC's existing load in the Williston area is supplied by a VEC-owned 34.5 kV radial transmission line originating at the GMP Digital Substation. This transmission line is approximately 40 years old and is approaching the end of its useful life. Abendroth pf. at 2.

39. The capacity of the existing VEC 34.5 kV transmission line is 10 MW. VEC cannot serve any of its Williston area load from any other source, as it is wholly dependent on this single radial feed transmission line and power supplied from GMP's Digital substation. Abendroth pf. at 2.

40. VEC's dependence on GMP's Digital Substation means that the VEC service area in Williston is subject to the same reliability issues discussed in findings 34 through 37, above. Abendroth pf. at 3.

41. VEC is proposing to make its existing 34.5 kV transmission line (3330 line) available to GMP and replace GMP's Digital Substation as its supply source with the proposed Tafts Corner Substation. As a result, VEC would obtain a strong and reliable 34.5 kV power source to meet its present and future energy needs. Abendroth pf. at 9.

42. VEC's capacity share of the new proposed 34.5 kV transmission line from the Tafts Corner Substation to the proposed switching station is 10 MW, which is 1/6 of the load capacity of the proposed line and equivalent to the design capacity of VEC's existing 3330 line. Abendroth pf. at 6.

43. The proposed project will provide sufficient future capacity to serve anticipated load growth in VEC's service area in Williston and Hinesburg. Abendroth pf. at 6-7.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

44. The proposed project will not adversely affect system stability and reliability and, in fact, will enhance system reliability. This finding is supported by findings 11 through 20, and 34 through 43, above, and findings 45 through 49, below.

45. The proposed Tafts Corners Substation will enhance system stability and reliability by reducing the exposure to Chittenden County area power outages in the event of a single contingency. Belval pf. at 14.

46. The NEPOOL Transmission Task Force and the Stability Task Force have made a finding that the proposed project will have no adverse reliability or stability impact on either the VELCO or neighboring transmission systems. As a result, these task forces have determined that the proposed project meets Section 18.4 requirements of the Restated NEPOOL Agreement. Belval pf. at 6.

47. VEC's members in the Williston area are currently served by a single radial feed that is subject to reliability issues. Once the proposed project is completed, VEC's requirements in Williston will be supplied over a short and direct connection to the VELCO 115 kV transmission system, which will result in improved reliability of service for VEC's Williston members. Abendroth pf. at 9-10.

48. The proposed connection and 34.5 kV transmission upgrades between the proposed Tafts Corner Substation and the GMP Digital Substation will constitute a looped feed for VEC's Williston Substation. Belval pf. at 10; Abendroth pf. at 10.

49. The proposed project will improve reliability and have no impact on system stability of the GMP 34.5 kV transmission system. Cecchini pf. at 16-17.

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

50. The proposed project will result in an economic benefit to the State. This finding is supported by finding 22 above and findings 51 through 56, below.

51. Operating the McNeil generator can help to reduce the exposure to loss of load in the area for a single contingency event. However, the proposed project would provide a significantly

higher level of area reliability at a lower 20-year net present value cost than operating the McNeil generator. Exh. GMP-TC-07 (Rev. 7-09-03) at 1, 3.

52. The proposed project's net present value cost over the next 20 years is estimated to be $472,000 less than operating the McNeil generator if the project costs are reduced for the common distribution components of the project.[7] The proposed project's net present value cost over the next 20 years is estimated to be $182,000 less than operating the McNeil generator if the full Tafts Corner costs are not discounted for the common distribution facilities. Exh. GMP-TC-07 (Rev. 7-09-03) at 3.

53. The economic benefit resulting from the higher level of area reliability provided by the proposed project was not included in the net present value analysis. Exh. GMP-TC-07 (Rev. 7-09-03) at 3.

54. The projected incremental cost of operating McNeil would be $107,000 in 2003; $156,000 in 2004; $244,000 in 2005; $305,000 in 2006; and $340,000 in 2007.[8] Exh. GMP-TC-07 (Rev. 7-09-03) at Attachment 1b; Belval pf. at 12.

55. The proposed project produces significant line loss benefits when compared to operating the McNeil generator. These line loss benefits are estimated to produce a 20-year net present benefit of $2.25 million dollars, and they are included in the analysis completed for the project in the Area Specific Collaborative Digital Injection vs. McNeil analysis. Cecchini pf. at 15-16; exh. GMP TC-7.

56. VEC members will benefit from reduced power delivery charges as a result of the operation of the new substation. Abendroth pf. at 10.

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7. The common distribution components serve both the proposed distribution improvements that will be constructed immediately to serve the local area, as well as those distribution facilities that are planned for the future.

8. Operating McNeil was only expected to be able to defer the need for the proposed project until 2008. Therefore, evidence regarding the incremental cost of McNeil was only presented for the years 2003-2007.

Aesthetics, Historic Sites, Air and Water Purity, the Natural Environment and Public Health and Safety

[30 V.S.A. § 248(b)(5)]

57. The proposed project will not have an undue adverse affect on aesthetics, historic sites, and water purity, the natural environment and the public health and safety. This finding is supported by findings 58 through 108 below, which address the issues under § 248(b)(5) including the criteria incorporated from 10 V.S.A. § 1424a(d) and 6086(a)(1) through (8), (8)(A) and (9)(K).

Outstanding Resource Waters

[10 V.S.A. § 1424a(d)]

58. There are no outstanding resource waters as designated by the Vermont Water Resources Board in accordance with 10 V.S.A. § 1424a in the vicinity of the proposed project. Clapp pf. at 6.

Water and Air Pollution

[10 V.S.A. § 6086(a)(1)]

59. The proposed project will not result in undue water or air pollution. The finding is supported by findings 60 through 70, below.

60. The proposed project will involve minimal earth work. The dust created by the construction of the proposed substation, the proposed new 34.5 kV line to the proposed switching station, and the upgraded transmission lines in existing rights-of-way will be minimal and insignificant. Clapp pf. at 4-5.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

61. Because the proposed project is not located above 1500 feet and it is not in a watershed of 20 square miles or less, it does not involve headwaters. Clapp pf. at 7.

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

62. The proposed project, as designed, will meet any applicable health and environmental conservation regulations regarding the disposal of wastes, and will not involve the injection of waste materials or any harmful toxic substances into the ground waters or wells. This finding is supported by findings 63 and 64, below.

63. Oil containment for the Tafts Corners Substation will be designed to prevent substation waste oil from entering ground water or waters of the State. Clapp pf. at 8.

64. VELCO proposes to install a rest room (one sink and one toilet) in the control building of the proposed substation. The Town of Williston has granted VELCO sufficient sewer capacity for the projected sewage flows. VELCO will submit an application to the Vermont Department of Environmental Conservation ("DEC") for Water Supply and Wastewater Disposal permit for approval of its water supply and wastewater disposal system, and it will not construct such a system until it has received the appropriate permit. Clapp pf. at 8; VELCO exh. 6.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

65. The proposed project does not require a water supply, other than for the small rest room within the proposed substation. Therefore, the small demand for water will have minimal negative impact under this criterion. Clapp pf. at 8.

Floodways

[10 V.S.A. § 6086(a)(1)(D)]

66. The proposed project will not restrict or divert the flow of floodwaters or endanger the health, safety and welfare of the public or of riparian owners during flooding, nor will any construction within a floodway fringe significantly increase peak discharge rates. Muddy Brook has the only mapped 100-year floodway in the vicinity of the proposed project. While the 3330 line crosses Muddy Brook, no re-grading will occur within this area and poles will be placed near the locations of existing poles, with one exception. The single pole that currently exists in the floodplain will be removed and not replaced. Clapp pf. at 9; exh. VELCO TJC-1.

Streams

[10 V.S.A. § 6086(a)(1)(E)]

67. The proposed project will maintain the natural condition of Muddy Brook, the only stream in the proposed project area. Measures to be employed to insure the protection of Muddy Brook during construction to avoid or minimize short term impacts will include: no poles will be placed within the existing stream channel; no stream channel alterations will occur; and there will be no significant enlargement or modification of clearing limits associated with the existing power line corridor crossing Muddy Brook. Clapp pf. at 9.

Shorelines

[10 V.S.A. § 6086(a)(1)(F)]

68. There are no shorelines in the vicinity of any portion of the proposed project. Clapp pf. at 10.

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

69. There are no "significant wetlands" located within the proposed project boundaries. Clapp pf. at 10; VELCO exh. TJC-1.

70. The applicants have obtained a letter from a wetlands ecologist for the Vermont Agency of Natural Resources, who concluded after review of her database and a site visit that the proposed project will not impact any wetlands. Clapp pf. at 10; exh. VELCO TJC-2.

Sufficiency of Water And Burden on Existing Water Supply

[10 V.S.A. § 6086(a)(2)&(3)]

71. The proposed project does not require a supply of water, other than for the small rest room at the substation. Therefore, existing water supplies will not be burdened. Clapp pf. at 10.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

72. The proposed project as designed will not result in unreasonable soil erosion or reduce the ability of the land to hold water. This finding is supported by findings 73-76, below.

73. The proposed substation site is located on fairly level ground with no nearby streams, thus precluding any significant danger of eroding sediments entering waters of the State. Clapp pf. at 5.

74. The construction involved with building the proposed 34.5 kV line from the proposed switching station to the proposed new Tafts Corners Substation, as well as the upgrade construction of the 3330 line from the proposed switching station to the existing Digital Substation to the existing Dorset Street Substation, involve minimal earth disturbance for pole placements. Clapp pf. at 11.

75. The petitioners have filed an erosion prevention and sediment control plan, including the substation grading plan with site specific erosion controls. Exh. VELCO-4.

76. VELCO will not begin construction of the proposed project until this plan has been approved by the ANR. Exh. Joint 1 at Paragraph 2. e.

Traffic

[10 V.S.A. § 6086(a)(5)]

77. The proposed project will not cause unreasonable congestion or unsafe conditions with respect to transportation systems. This finding is supported by findings 78 and 79, below.

78. The only potential impact that this proposed project could have on the transportation system will be associated with the construction of the 34.5 kV lines across the I-89 highway corridor, Route 2A, Route 116, and Dorset Street. Sheriffs and appropriate assistants will be hired to manage traffic flow during construction pursuant to standard operating procedures for these types of line crossing proposals. Clapp pf. at 11-12.

79. The petitioners have received highway crossing permits for the two I-89 crossings, as well as the crossings of Routes 2A and 116. VELCO exh. RB-Supp-5; Compliance filing July 16, 2003.[9]

9. This compliance filing will be admitted into the record as exh. VELCO-7, unless a party objects to its admission in its comments on this Proposal for Decision. If an objection is received, it will be ruled upon forthwith.

Educational Services

[10 V.S.A. § 6086(a)(6)]

80. The proposed project will not impact the local school system other than to enhance the electrical services currently and indirectly provided to the schools. As such there will be no adverse impact on educational services. Clapp pf. at 12.

Municipal Services

[10 V.S.A. § 6086(a)(7)]

81. The proposed project will not require municipal or governmental services. Clapp pf. at 12.

Aesthetics, Scenic and Natural Beauty, Historic Sites or Rare And Irreplaceable Natural Areas

[10 V.S.A. § 6086(a)(8)]

82. The proposed project will not have an undue adverse effect on the scenic or natural beauty of the area, or upon aesthetics, historic sites or rare and irreplaceable natural areas. This finding is supported by findings 83 through 103, below.

83. The proposed substation site is north of the westbound lane of I-89 to the northeast of the intersection of Route 2A at Exit 12. The site is approximately 800 feet east of the center line of Route 2A in a disturbed area south of Maple Tree Place. The site, which is 450 feet by 300 feet, is located under the existing 115 kV transmission line that serves it, and is not visible from Route 2A because of a large berm created from Maple Tree Place construction. At its closest point, the proposed substation fence will be about 65 feet from the I-89 right-of-way. Boyle pf. at 2; VELCO exh. TJB-2; VELCO exh. 4.

84. The proposed substation will be partially and intermittently visible from both the eastbound and westbound lanes of I-89. VELCO has proposed certain mitigation measures to screen the substation on the south and east sides as viewed from I-89. VELCO's final screening plan includes the construction of additional large landscaped berms (up to 10 feet high above the existing grade) on the south side between the substation and the I-89 right-of-way, as well as a smaller berm along a portion of the east side. Plantings will be as depicted on VELCO's supplemental filing of September 15, 2003, and include numerous 10-12 foot evergreens planted

on the berms. Boyle pf. at 2; VELCO supp. filing dated September 15, 2003[10]; 9/9/03 tr. at 33-34, 46-48.

85. Even with the proposed berm and plantings on the east side, some of the proposed substation will be visible from the north-bound lane of I-89 when viewed from the east. The upper portions of the substation structures will remain visible for many years until the proposed landscaping can grow to sufficient height to provide an adequate screen. Boyle pf. at 2; VELCO exh. 4; 9/9/03 tr. at 46-48.

86. Moving the proposed substation further north to make it less visible from I-89 is constrained by both a Class III wetland and a proposal by the State of Vermont to construct a park and ride parking lot and access. 7/2/03 tr. at 37-38; VELCO exh. 1. The Petitioners have moved the substation to the north as far as possible within the property on which they have an option, with such movement resulting in the A-frame tower on the south side of the substation being located about 100 feet from the I-89 corridor fence. Tr. at 40-41.

87. To purchase an additional 100 feet by 350 feet to the north to allow the substation to be moved in that direction may cost up to $200,000, the price the owners are asking for the property. An additional 200 feet by 350 feet may cost up to $350,000 (again an asking price) additional to the $233,000 costs for the existing parcel. 7/2/03 tr. at 34.

88. Visual impacts from the substation could be partially mitigated by lowering its ground level five or more feet at its proposed location. This option would require either construction of retaining walls, increasing the angle of the side slopes, or extending the slopes farther out toward the property lines. The first alternative would increase the areas available for berming and planting, while the latter two alternatives would reduce theses areas, particularly on the east and south sides. Reducing the floor elevation of the substation would increase construction costs by approximately $180,000 to $200,000 for excavation, and by another $50,000 to $100,000 for engineering, and an undetermined cost for construction of retaining walls. 9/9/03 tr. at 17-30.

89. Another option for additional mitigation of aesthetic impacts would be the construction of a large landscaped berm along the east side of the substation on adjoining property. This

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10. This compliance filing will be admitted into the record as exh. VELCO-8, unless a party objects to its admission in its comments on this Proposal for Decision. If an objection is received, it will be ruled upon forthwith.

option was considered by VELCO but was not pursued further because of the unwillingness of the adjoining property owner to discuss this option. 9/9/03 tr. at 11, 26-27.

90. VELCO proposes a low profile substation configuration that minimizes visual impacts. Boyle pf. at 2.

91. Maple Tree Place has been assessed a penalty of $20,000 for violations of its Act 250 permit conditions. These funds have been reserved for screening Maple Tree Place from I-89. The proposed Maple Tree Place screen may also be effective in screening the substation, depending on its location relative to the highway right-of-way. If the Environmental Board is successful in negotiations with the Vermont Transportation Department to plant in the right-of-way in higher elevations, the screening will be effective sooner. Boyle pf. at 5.

92. Substation lighting will include two low-level (about 70 watt) lights to illuminate the access gate to the control room door. These fixtures are pointed down and are controlled by photocell. The perimeter of the substation will be also equipped with lighting adequate to illuminate the area for safe working conditions at night. This lighting will only be used when crews need to service equipment in the substation after dark. VELCO supp. filing dated 9/18/03.

93. The proposed 34.5 kV line leaving the substation will cross I-89 approximately 750 feet east of Route 2A and proceed southerly between two hotels and cross over Hurricane Lane. From that point south, the line will have a VEC 12.5 kV underbuild and will parallel a portion of the existing 115 kV transmission line until it turns to the southwest toward the proposed switching station. Part of this section is through a mix of deciduous and evergreen vegetation, which provides adequate screening, and part is through wooded scrub brush and open meadow. No additional mitigation is needed for this section because of the line's location in relation to Route 2A. Boyle pf. at 3; VELCO exhs. TJB-3, 3A, 3B, 4, 4A and 4B.

94. The 34.5 kV crossing of I-89 will be constructed using a design that minimizes visual impact from the northbound and southbound lanes of I-89, including constructing it at approximately the same height as the existing 115 kV line and the use of duplicate structures. VELCO Supp. Filing 7/16/03.

95. There is no clear written community standard regarding the aesthetics of the I-89 crossing or for transmission corridors in the Williston Town Plan or Bylaws. The Chittenden

County Regional Planning Commission plan states that power lines should not be a contributing factor to sprawl and that undergrounding should be considered. The line is needed because of the additional summer load requirements and undergrounding of these lines is not a viable option economically. All components of the proposed project are located in an existing transmission corridor. Boyle pf. at 5-6.

96. 34.5 kV crossings comparable to the proposed I-89 crossings are prevalent on roadsides throughout the region and the state, some with heavy telephone lines and multiple circuits. Petitioners filed revised simulations of the I-89 crossing on July 16, 2003, which indicated that a second H-frame structure is the preferred alternative to the originally proposed taller single-pole structures. Exh. VELCO-3; Boyle pf. at 6.

97. The switching station will be a hub for three 34.5 kV transmission lines; one proposed from the north as described above, the existing Digital 34.5 kV line heading south to the VEC substation, and the upgraded 34.5 kV line from the Digital Substation entering the switching station from the west. Mitigation for aesthetic impacts of the switching station will include additional screen plantings close to Route 2A in an existing deciduous hedgerow. Boyle pf. at 3-4; VELCO exh. TJB-5.

98. Two options have been considered for rebuilding the existing 34.5 kV line from the switching station to the Digital Substation. One would use more poles to carry the heavier conductor at the same height as the existing line, or another would use higher but fewer poles to support the new conductor. Aesthetically, the taller poles are more desirable, since the insulators and cross-arms would normally be above the cone of vision of viewers. Higher poles will, therefore, be installed. Boyle pf. at 4; VELCO exh. TJB-6 and 6A.

99. The line corridor from the switching station to the Digital substation will be altered in the meadow at the northeast corner of Walker Hill Road and Brownell Road, by angling the line northward to follow the existing tree line on the east and north side of the meadow. The modified line corridor will be backgrounded with evergreen and deciduous vegetation, reducing the visibility of poles and conductors as seen from South Brownell and Walker Hill Roads. Boyle pf. at 4.

100. There will be no appreciable change in aesthetic impacts to the portion of the line that is to be reconductored from the Digital substation to the Dorset Street substation. Boyle pf. at 5.

101. The Vermont Division for Historic Preservation ("Division") reviewed the Project and concluded that the Division has no concern with the pole drilling locations along Muddy Brook as long as corollary ground disturbance along access points is avoided. Exh. VELCO-TJC-8.

102. The Division concludes that the proposed Project will not have an adverse effect on any historic or archeological resources provided that the following requirements are met:

a. VELCO must map the three identified archeologically sensitive areas on the site plan and label them as not-to-be-disturbed buffer zones. Copies of this revised site plan must be submitted to the Board and to the Division.

b. Topsoil removal, grading, scraping, cutting, filling, stockpiling, logging or any other type of ground disturbance with the exception of drilling for new transmission line poles is to be prohibited within the buffer zones without written approval of the Board and the Division. The project contractor must be fully notified about the buffer zones restrictions.

c. If access by mechanized equipment within the buffer zones cannot be conducted under dry or frozen ground conditions, or will result in any type of ground disturbance, an archeological study to identify sites must be carried out by a qualified consulting archeologist prior to construction. The study must be scheduled accordingly so that mitigation measures that may be necessary can be satisfactorily planned and accomplished prior to construction.

d. Any archeological site must not be impacted until any necessary mitigation measures have been carried out. Mitigation may include, but is not limited to, further site evaluation, data recovery, redesign of one more proposed project components, or specific conditions that may be imposed during construction.

e. Proposed mitigation measures must be discussed with and approved by the Division prior to implementation, and a copy of all mitigation proposals must be filed with the Board. The archeological studies must result in one or more final reports, as appropriate, that meet the Division's Guidelines for Conducting Archeological

Studies in Vermont. Copies must be submitted both to the Division and to the Public Service Board.

f. All archeological studies and assessments must be conducted by a qualified consulting archeologist and should follow the Division's Guidelines for Conducting Archeological Studies in Vermont. VELCO's archeological consultant may submit any scope of work to the Division for review and approval.

Tr. 7/2/03 at 16; exh. VELCO-TJC-8.

103. A representative of the Vermont Department of Fish and Wildlife, Nongame and Natural Heritage Program, reviewed the Project and concluded that his database revealed no known occurrences of significant natural communities of rare, threatened or endangered animals or plants in the Project area. Clapp pf. at 13; exh. VELCO TJC-6.

Discussion

Based on the above findings and with the possible exception noted below, I find that the proposed project will not have an undue adverse effect on the aesthetics or scenic and natural beauty of the area. In reaching this conclusion, I have relied on the Environmental Board's methodology for determination of "undue" adverse effects on aesthetics and scenic and natural beauty as outlined in the so-called Quechee Lakes decision. Quechee Lakes Corporation, #3W0411-EB and 3W0439-EB, dated January 13, 1986.

As required by this decision, it is first appropriate to determine if the impact of the project will be adverse. The proposed project would have an adverse impact on the aesthetics of the area if its design is out of context or not in harmony with the area in which it is located. If it is found that the impact would be adverse, it is then necessary to determine that such an impact would be "undue." Such a finding would be required if the proposed project violates a clear written community standard intended to preserve the aesthetics or scenic beauty of the area, if it would offend the sensibilities of the average person, or if generally available mitigating steps will not be taken to improve the harmony of the project with its surroundings. The Board's assessment of

whether a particular project will have an "undue" adverse effect based on these three standards will be significantly informed by the overall societal benefits of the project.[11]

Given the facts of this case, it would be difficult to find, for most of the locations in which the proposed project is to be sited, that it would have an adverse effect on the aesthetics of the area. I reach this conclusion because the project in most areas will be located entirely within existing rights-of way, and it will be largely the replacement of existing transmission facilities with upgraded facilities that should not have significantly greater aesthetic impacts. On the other hand, both the Tafts Corners Substation and the nearby 34.5 kV crossing of I-89 would have an adverse effect on the scenic and natural beauty of the area because of their high visibility from I-89.

Notwithstanding the above, the Tafts Corners I-89 crossing is unlikely to have an undue adverse aesthetic effect on the area because: (a) it will not violate a clear written community standard regarding aesthetics; (b) the record evidence indicates that the highway crossing would not be shocking or offensive to the average person; and (c) the petitioners have committed to taking generally available steps to mitigate the impacts of this project element. The proposed substation, however, may not meet this test because it is not certain that, even with the proposed mitigation, the project will not be shocking or offensive for many years, particularly when viewed from the east and possibly the south sides.

The visibility of this proposed substation, even with the mitigation proposed by the petitioners, may still not be adequate to effectively screen it from view from I-89 and keep the adverse impact from being undue. As outlined in the findings above, this substation will be located just to the northeast of the Tafts Corner exit between the I-89 and Maple Tree Place. Because I-89 is elevated as it crosses Route 2A at this exit and because the substation is so close to the I-89 right-of-way, views to the north (unless there is very substantial screening to supplant the existing vegetation) will be directly at this substation. Also, there are some views from the northbound lane of I-89 that, while at a greater distance, will also provide direct views of the substation and its extensive electrical structures and equipment. After various iterations, VELCO's final landscaping plan includes higher and longer berms, as well as more numerous

11. Consider, for example, reduction in need for power plant or transmission investments, or other societal costs.

and taller trees than originally proposed, in an attempt to better mitigate the adverse visual impact of this substation.

Notwithstanding the improved final plan, I am not convinced that this plan will be adequate to effectively mitigate views of the substation, particularly when observed from the east. Until the plantings have reached sufficient height in the next five to ten years, these plantings may not fully mitigate this aesthetic impact.[12] Consequently, I recommend that the Board include a condition in the certificate of public good that states that the Board may require VELCO to install additional mitigation measures for this substation - which could include the option of constructing an additional berm with appropriate plantings on the east side on adjoining property (if VELCO could obtain appropriate property rights) and/or planting of additional landscape screening within the I-89 right-of-way (if allowed by AOT) - if, after view of the completed project, the Board finds that the completed mitigation measures are inadequate.[13]

I should note here that the aesthetic problems described above have been largely caused by the two basic choices the Company made during the planning of the proposed project. The first was VELCO's selection of such a constrained site for this large substation. Given the limited amount of land apparently available between I-89 and Maple Tree Place, the Company has limited options on this parcel for mitigating the substation's aesthetic impacts. The second was caused by VELCO's failure to provide detailed plans for the substation, including its location on the parcel, until very late in the review process. This made it impossible to adequately review the aesthetic impact of the substation on the schedule desired by the petitioners, but it also made it impossible, once significant aesthetic concerns were identified about the proposed site, to consider other options for this substation (including entirely different sites) that might have been

12. Testimony during the continued technical hearing indicated that alternatives such as moving the substation farther north and/or lowering its floor elevation would not be cost effective investments. See findings 87-88, above.

13. In the Stipulation, VELCO has already agreed to a similar post-construction review of the adequacy of the screening for the substation. See paragraph 21(h)(ii) of the Stipulation. I recommend that the Board add the condition described above to ensure that the Board retains the authority to require additional screening after VELCO's proposed landscaping has been completed.

possible if there had not been such time constraints during the review process.[14] The need, therefore, for the proposed condition to allow further mitigation after post-construction review has been caused by VELCO's own actions, and, thus, the Company must bear these consequences. This condition will allow the time necessary to consider some additional mitigation alternatives, such as construction of an additional landscaped berm on adjoining property and/or the addition of additional landscaping within the I-89 right-of-way.

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

104. A wildlife biologist from the Vermont Department of Fish and Wildlife reviewed the proposed project and concluded that there were no issues related to necessary wildlife habitat or threatened or endangered species. Clapp pf. at 13; exh. VELCO TJC-7

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

105. The proposed project will have no negative impact on any governmental or public facilities, therefore, it will not unnecessarily or unreasonably endanger the public or quasi-public investments in any governmental public utility facilities, services, or lands, or materially jeopardize or interfere with the function, efficiency, safety of, or the public's use or enjoyment of or access to such facilities, services, or lands. This finding is supported by findings 106 and 107, below.

106. There are no public facilities, other than Interstate 89 and a potential recreation trail near Muddy Brook, that are or may be located within close proximity to the proposed project. The proposed substation will be located beyond the highway limits and within its own protective fencing. The I-89 crossing will be in conformance with a permit from the Agency of Transportation. Clapp pf. at 14.

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14. Given that no party has opposed VELCO's proposed location of the substation and that the record evidence indicates that VELCO should be able to sufficiently mitigate the substation's visual impact (albeit with the possible need for additional screening), I conclude that the Board can make a positive finding on the project's aesthetic impact.

107. As for the potential development of a recreation trail currently under consideration by the South Burlington Planning Commission, the Petitioners have only recently been apprized of this and will continue to work with the Commission to insure that any such trail and line design consider public health and safety, as well as recreational value to the public, to the fullest extent possible. Clapp pf. at 14.

Public Health and Safety

[30 V.S.A. § 248(b)(5)]

108. The proposed project will enhance public health and safety by ensuring that safe reliable power will be available. All construction will be in conformance with the National Electrical Safety Code, the substation will be fenced, and all lines will be within appropriate rights-of-way. Belval Supp pf. at 7-8.

Consistency with Resource Selection

Integrated Resource Plan

[30 V.S.A. § 248(b)(6)]

109. The Project has been the subject of an Area Specific Collaborative - Digital Injection (PSB Docket No. 6797) in which the parties agreed that the Project meets a need that is present today and that the Project cannot feasibly, in the necessary time frame, be cost-effectively avoided or deferred through demand side management or distributed generation options. Cecchini pf. at 8-9; exh. GMP-TC-08 at 7.

Compliance With Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

110. The DPS has determined, in a letter dated July 3, 2003, that the proposed project is consistent with the Vermont 20-Year Electric Plan, in accordance with 30 V.S.A. § 202(f), provided that the petitioner's actions in this matter are consistent with their petition and testimony, and consistent with the June 25, 2003, Stipulation filed in this docket. Exh. VELCO-2.

Outstanding Water Resources

[30 V.S.A. § 248(b)(8)]

111. None of the streams or waters in the vicinity of the proposed project are outstanding water resources. Clapp pf. at 6.

Existing Transmission Facilities

[30 V.S.A. § 248(b)(10)]

112. The proposed project will have no adverse affect on Vermont's customers or utilities and in fact will improve reliability of existing services. Belval pf. at 13-14; Cecchini pf. at 8-10.

III. CONCLUSION

Based upon all the above evidence, the construction of the 115 kV/34.5 kV Tafts Corners Substation, construction of a 34.5 kV switching station, and the associated construction and improvement of 34.5 kV transmission lines from the Tafts Corners Substation to the switching station (including a 34.5 kV transmission connection from the switching station to the existing VEC Williston Substation), from the switching station to the existing GMP Digital Substation, and on to the existing GMP Dorset Street Substation:

(a) will not unduly interfere with the orderly development of the region with due consideration having been given to the recommendations of the municipal and regional planning commissions, and the recommendations of the municipal legislative bodies;

(b) is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy efficiency and land management measures;

(c) will not adversely affect system stability and reliability;

(d) will result in an economic benefit to the state and its residents;

(e) will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and the public health and safety, with due consideration having been given to the criteria specified in

10 V.S.A. § 1424a(d) and § 6086(a)(1) through (8), 8(A) and (9)(K);

(f) is consistent with the principles of least-cost integrated planning;

(g) is in compliance with the electric energy plan approved by the DPS under § 202 of Title 30 V.S.A.;

(h) does not involve a facility affecting or located on any segment of the waters of the State that has been designated as outstanding resource waters by the Water Resources Board; and

(i) can be served economically by existing or planned transmission facilities without undue adverse effect on Vermont utilities or customers.

To the extent these findings are inconsistent with any proposed findings, such proposed findings are denied.

A Proposal for Decision pursuant to 3 V.S.A. Section 811 has been served upon the parties to this case.

Dated at Montpelier, Vermont, this 21st day of October , 2003.

s/Wayne L. Foster

Wayne L. Foster
Hearing Officer

IV. COMMENTS ON THE PROPOSAL FOR DECISION

On October 3, 2003, both VELCO and the Department filed comments on the Proposal for Decision that the Hearing Officer had initially circulated to the parties. In response to those comments, the Hearing Officer issued a revised Proposal for Decision in which he largely adopted the proposals set forth in the parties' comments. Following the circulation of the revised Proposal for Decision, on October 20, 2003, VELCO filed a letter stating that it had no further comments on the Hearing Officer's revised Proposal for Decision. The Department has not filed any comments on the revised Proposal for Decision.

V. BOARD DISCUSSION

The Board is deeply troubled by the fact that although VELCO filed its petition for approval of the Tafts Corners substation on April 1, 2003, it did not specify the final location of the substation on the involved parcel of land until the end of August.[15] This necessarily delayed the review of the substantive merits of the project, for without knowledge of the exact placement of a project, its impact under the Section 248 criteria (most notably here, its aesthetic impact), and the import of other supporting information, cannot be adequately judged. In effect, VELCO filed a "placeholder" application for the Tafts Corners substation on April 1, leaving much of the real work to be squeezed into the end of the process.

This strategy presents unacceptable risks to all parties, including VELCO. It also presents the Board with the unwelcome choice between approving a project which, had there been sufficient review time, might have been modified to the advantage of all (including the many members of the public who will view the substation as they drive by on I-89), or denying the project and placing at risk the reliability of electric service to this part of Vermont.

After a careful review of the record and the Proposal for Decision, we conclude that we should adopt the Proposal for Decision (as revised by the Hearing Officer). Our decision to approve the Tafts Corner Substation is informed by the following considerations. First, as the

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15. Indeed, the preliminary location for the substation as shown on Exh. VELCO–TJB–2 indicated that it would be significantly further from the nearby interstate highway, with a greater potential for mitigation of aesthetic impacts.

Hearing Officer correctly notes in his Proposal for Decision, our assessment of whether a project has an undue adverse impact on aesthetics hinges in significant part on the benefits of the project. Here, no party disputes that there is a pressing need for the substation facilities.

At the same time, it is important to recognize that the substation site will be passed by thousands of Vermont citizens and visitors every day. Though the public's views will, for the most part, be fleeting, it would still be undesirable for VELCO to unnecessarily add to the visual degradation of the surrounding area. Because vegetative screening represents a reasonably available measure to lessen the aesthetic impacts of the substation, it is appropriate — indeed, vital — to put in place sufficient vegetative screening to minimize and mitigate the visual impact of the substation. We thus adopt the Hearing Officer's proposed condition that allows us to require VELCO to install additional measures to mitigate the visual impact of the Tafts Corners Substation if, after completion of construction, the Board determines such measures to be needed.[16] With this condition, we are able to conclude that the Tafts Corners Substation is not likely to have an undue adverse effect on the aesthetics of the area.

VI. Order

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The Joint Petition of Vermont Electric Power Company, Inc., Green Mountain Power Corporation and Vermont Electric Cooperative, Inc., for a Certificate of Public Good authorizing the construction of a 115 kV/34.5 kV substation at Tafts Corners and the construction of a 34.5 kV switching station on St. George Road, both in the Town of Williston, Vermont, and the associated construction and improvement of 34.5 kV transmission lines from Tafts Corners to the switching station (including a 34.5 kV transmission connection from the switching station to the existing VEC Williston Substation), from the switching station to the existing GMP Digital

16. In its comments (filed on October 3) in response to the original Proposal for Decision, VELCO noted its understanding that the Board could impose additional measures to mitigate the visual impacts of the substation only after an evidentiary hearing. VELCO's understanding is essentially correct; we hereby clarify that the Board may require VELCO to implement additional mitigation measures, but will do so only after providing an opportunity for an evidentiary hearing.

Substation and on to the existing GMP Dorset Street Substation, all located in the Town of Williston, Vermont, and the City of South Burlington, Vermont, in accordance with the evidence and plans submitted in this proceeding, will promote the general good of the State of Vermont in accordance with 30 V.S.A. § 248, and a certificate of public good to that effect shall be issued.

2. The Stipulation, filed by VELCO, the DPS and ANR on June 25, 2003, is accepted and approved. Compliance with all terms of the Stipulation is required.

3. Within 30 days of the completion of construction of the Tafts Corner Substation (including installation of all landscaping), VELCO shall arrange a site visit with the Board and all parties to review the effectiveness of the aesthetic mitigation measures, as installed. As a result of this inspection, the Board reserves the right to require VELCO to install additional mitigation measures for this substation, including the options of constructing an additional berm with appropriate plantings on the east side on adjoining property if appropriate rights can be obtained from the property owner, and/or plant additional landscape screening within the I-89 corridor if approved by the Agency of Transportation.

4. The Board has continuing jurisdiction to resolve any disputes arising under the above-referenced Stipulation.

Dated at Montpelier, Vermont, this 22nd day of October, 2003.

s/Michael H. Dworkin)
)
) PUBLIC SERVICE
)
s/David C. Coen) BOARD
)
) OF VERMONT
s/John D. Burke)

OFFICE OF THE CLERK

FILED: October 22, 2003

ATTEST: s/Susan M. Hudson
Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: Clerk@psb.state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.